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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/602,511	06/23/2000	Gerd Spalink	450117-02534	9100
20999	7590	02/13/2004	EXAMINER	
FROMMER LAWRENCE & HAUG 745 FIFTH AVENUE- 10TH FL. NEW YORK, NY 10151			NGUYEN, DUNG X	
			ART UNIT	PAPER NUMBER
			2631	11

DATE MAILED: 02/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/602,511

Applicant(s)

SPALINK, GERD

Examiner

Dung X Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 9 and 11 - 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,8,9,11,18 and 19 is/are rejected.
- 7) ☒ Claim(s) 2 - 7 and 12 - 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____. |

Response to Arguments

1. Applicant's arguments filed on January 5, 2004 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Shibuya et al. (US patent # 6,490,010 B1) and White (US patent # 6,430,243 B1).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 8, 9, 11, 18, and 19 are rejected** under 35 U.S.C. 103(a) as being unpatentable over Shibuya et al. (US patent # 6,490,010 B1), further in view of White (US patent # 6,439,243 B1).

Regarding claim 1, Shibuya et al. discloses (figure 12):

- First phase error detecting means (see figure 12, block 57, column 22, line 23 – 35) is adapted for detecting a robust estimate for the phase error of the received digital input signal and for generating and outputting a robust phase error signal representative of the robust phase error;
- Units 58, 60, 61, 62, 63, 64, and 65 represent the second phase detecting means is adapted for receiving the robust error signal from the first error detecting means and generating an output of a phase error signal (see figure 12, column 22, line 35) and

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deriving a frequency sensitive phase error signal from the phase error signal (column 22, lines 30 – 62);

- Units 58, 60, 61, 62, 63, 64, and 65 also represent sensitive frequency error signal for using to reduce the frequency error (column 10, line 14) with respect to the received digital signal to enable locking to at least the carrier thereof (column 10, lines 10-19).

Shibuya et al. differs from the instant claimed invention that it does not show the sign of frequency error. However, White discloses the use of the polarity (sign) of the frequency error (column 2, lines 4 – 17 and column 6, lines 36 – 43). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Shibuya and White to provide the use of the polarity (sign) of the frequency error for improving the accuracy of the phase detection process (column 2, lines 20 – 22 of White).

Regarding claim 8, Shibuya et al. further discloses a step of generating and outputting a locking from phase error signal and/or an average value (column 3, lines 51 – 57) is beyond a threshold (column 2, lines 19 – 27).

Regarding claim 9, Shibuya et al. further discloses (figure 12) that locking signal is using phase error signal (57, 58, 60) and valid phase error signal from units 61, 62, 63, 64.

Regarding claim 11, the limitations are analyzed in the same manner set forth as claim 1.

Regarding claim 18, the limitations are analyzed in the same manner set forth as claim 8.

Regarding claim 19, the limitations are analyzed in the same manner set forth as claim 9.

Allowable Subject Matter

4. **Claims 2 – 7 and 12 - 17 are objected** to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mohammad et al. (U.S. Patent No. 6,650,649 B1) discloses an extension interface units in a communication system.

Contact Information

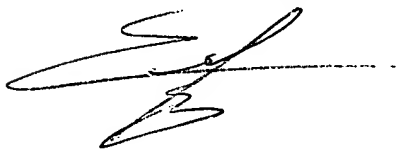
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung X. Nguyen whose telephone number is (703) 305-4892. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Ghayour Mohammad H. can be reached on (703) 306-3034. The fax number for this group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

DXN

January 9, 2004

A handwritten signature in black ink, appearing to be 'DXN', written over a horizontal line.